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Lapeyre

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[54] **COMPREHENSIVE COMPUTER DATA AND CONTROL ENTRIES FROM VERY FEW KEYS OPERABLE IN A FAST TOUCH TYPING MODE**

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Related U.S. Application Data

[63] Continuation of Ser. No. 678,543, Apr. 16, 1991, abandoned, which is a continuation of Ser. No. 597,034, Sep. 20, 1990, Pat. No. 5,062,070, which is a continuation of Ser. No. 395,216, Aug. 17, 1989, abandoned, which is a continuation-in-part of Ser. No. 729,559, May 2, 1985, abandoned, and a continuation-in-part of Ser. No. 787,633, Oct. 15, 1985.

[51] **Int. Cl.**[5] **G06F 3/023**

[52] **U.S. Cl.** **364/709.16**; 364/209.15

[58] **Field of Search** 364/709.16, 709.15

[56] **References Cited**

U.S. PATENT DOCUMENTS

3,675,513	7/1972	Flanagan et al.	364/709.16
3,892,958	7/1975	Tung	364/709.16
3,967,273	6/1976	Knowlton	341/22

OTHER PUBLICATIONS

C. K. Clauer; IBM Tech. Dis. Bulletin, vol. 21 No. 10 Mar. 1979.

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[57] **ABSTRACT**

A data processing keyboard system is provided wherein data and command signals from the keyboard are entered by two or more successive keystrokes. At least two operation modes serve to change the entry command assignments to the keys, thereby affording a large number of selections from a few keys. This makes available from the comprehensive capability of present day computers large numbers of keyboard accessible commands. Also surprisingly then this invention can replace a normal QWERTY typewriter keyboard with most of its functions by a set of only three, four, seven or nine keys. Thereby alphabetic characters, decimal digits and a store of computer command entries may be processed with each entry requiring two or more strokes of the computer keyboard keys. Functional commands such as spacing return or shift can be intermixed with the choice of data characters. Means for shifting from a computation mode to an alpha mode of computer operation may be provided. Keyboard selected modes change the key assignments. Thus an alpha mode for a computer may assign the entire alphabet first stroke to a set of three home keys arranged in a geometric configuration of no more than sixteen keys for touch typing control by fingers on one hand. The key assignments are made wherein the easier to access strokes are allocated to the more frequently encountered letters of the alphabet. Provisions are made for allocating some of the keys to custom tailored command signals entered from the keyboard.

2 Claims, 6 Drawing Sheets